PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent end Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE

(use as many sheets as necessary)

Sheet

STATEMENT BY APPLICANT

Attorney Docket Number

Complete if Known **Application Number Filing Date First Named Inventor** Art Unit **Examiner Name** 

	•	U.S. PATI	ENT DOCUMENTS	
Examiner Initials	Document Number Number - Kind Code <sup>2</sup> (# known	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Cotumns, Lines, Where Relevant Passages or Relevant Figures Appear
)AL	 US-6239, 265	5-29-01	Cook, Phillip Dan	
			Cheruvallath, 2. S	. 4 21
	 US-6,3/0,198	1.0 = 3.0 = 01.	Jana, Jin-Yan et	ما م
	 US-6,294,664_	9-25-01	Ravikumaset	V. etal
	 US-6, 117, 993	9-12-00	Just, G. et al	
	 US-6,031,092	2-29-00	Just 6. et al	
	 US 5. 883 .237	3-16-99	stec, w. J. eral	
	 US-5,644.048	7-1-97	Yau, E.K.	
	 US-6,096,880	8-1-00	Kool, E.T.	
	 US 5, 990, 300	9-23-99	H/att, A. C.	
	 055,932,450	9-3-99	Dattagupta, No et	<u>rai</u>
	 08 5,916,777	6-29-99	Kacla, D. L. eta	<u> </u>
	 105 5,739, 3/1	4-14-98	Lackeys O. L.	<u> </u>
	 US 650, 271	7-22-97	Richards, R. M. Cook, Phillip D.	
	 05-5,635-,488-	6-3-9-/	Cook, Phillip D.	
	 Us-	5-13-29-1	Hyman, E.D	
	 US		A	***************************************
	 us.			
	 US-			

	 FORI	EIGN PATENT D	OCUMENTS		
Examiner Initials	Foreign Patent Document  County Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>3</sup> (Fincen)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τē
	 		.,,		
			and the second s	***************************************	
			An and the state of the state o		

Examiner Signature	dillane	Date Considered	"/2/03
-----------------------	---------	--------------------	--------

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (MPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under MPO Standard ST. 16 if possible. <sup>8</sup> Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0551-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute fi	or form 1449B/PTC	)			Complete if Known			
				201105	Application Number			
INFUR	RMATION	DIS	CL	DOUKE	Filing Date			
STATI	EMENT B	ΙΥ Δ	PPI	ICANT	First Named Inventor	Blizabeth G. Fraunce		
• • • • • • • • • • • • • • • • • • • •					Group Art Unit			
	(use as many st	neets a	s nece.	ssary)	Examiner Name			
Sheet	2	of		3	Attorney Docket Number			

•		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, megazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published.	T2
		Wiley-Liss, New York.	
		VAN DER KROL, et al (1988) Biotechniques 6: 958-975.	
		CLERCQ, e+ a1 (1970) Virology 42/2 421-428	
	A.	FROEHLER et al (1986) Nycleic Acids Res. 14: 5399-5407.	
a, a		SINHA et al (1983) Tet/ahedron Lett. 24: 5843-5846.	
NA PO	<	LETSINGER et al (1965) J. American Chemical Soc. 87%3526.	
VY "	Ø	SINNA and FRY (1984) In Sanghui and Cook (Eds) " Cay boby drate Modifications	
Rush		Chemical society, Washington, D.C.	
		GRI FFITHS and EPERON (1987) Nucleic Acids Res. 15: 4145-4162	
		sult and EPERON (1992) Nucleic Acids Res. 20: 6303-6309.	
		EEKSTEIN (1985) Annu. Rev. Biochem 54:367-402.	

Examiner Signature	duline	Date Considered 11 21 1 0 3
-----------------------	--------	--------------------------------

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08B (10-01)
Approved for use through 10/31/2002, OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

1.3

Substitute fo	or form 1449B/PT	0		Complete If Known		
			01 001105	Application Number		
INFUR	(MIA HUN	1 DI2	CLOSURE	Filing Date		
STATI	EMENT	RY AI	PPLICANT	First Named Inventor	51, zabeth 6. Frayne	
OIAII		<i>7</i>   \(\tau_1\)	LIOAII	Group Art Unit	· ·	
	(use as many s	heets as	necessary)	Examiner Name		
Sheet	3	of	3	Attorney Docket Number		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initiats	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(e), volume-issue number(e), publisher, city and/or country when published	<b>T</b> 2
May Core	45	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(e), volume-issue number(s) publisher city and/or country where nublished  KOZTOLKIEWICZ et al (1995) Nucleic Acid  Res. 23: 5000 - 5005.	
122 kg	nded	NIETO et al (1994) Science 264: 835- 839.	
7		MORGAN et al (1993) Nucleic Acids Res. 21,4615-4620.	
armaning bayan sabapita bayabi a sa		WOLF (1992) PNAS 89: 7305 -7309.	
not don	J	MATZURA and ECKSTEIN (1968) European J. Biochem. 3: 448-452	
85 KE 012	103	BURGERS and ECKSTEIN (1979), J. Biol. Chem. 254: 6889-6893.	
, w		Goodman et al (1993) Crit, Reu, Biochem. Mol. Biol. 28: 83-126.	
		r	
	·••••		

Examiner	hit art	Date	11/21/03
Signature	dilhou	Considered	1107

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Petent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/068 (08-03)

Approved for use through 07/31/2006, OA/B 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Approved for use through 07/31/2006, OA/B 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Complete if Known

Application Number | 0 / 0 0 7, 48 9

Filing Date | 12 / 05 / 7 00 / |

First Named Inventor | 12 / 05 / 7 00 / |

At Unit | 16 2 3

Examiner Name | 0 / 0 4 | Chare

Sheet | 50 | Attorney Docket Number

Examiner	Cite	NON PATENT LITERATURE DOCUMENTS  Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Initials*	No.	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
μ		MELGAR, D. and GOLDTHWAIT, D. A. "The effect of metals on the mechanism of action of leoxyvibonuclessell" (1968) J. Biol. Chem. 243: Page 4414.	
		;	
dh		SPETZER, and ECKSTEIN; 1' Inhibition of deoxynibonu deases by phosphono thioate groups in Oligodeoxy ribonucleo tides' (1988) Wodeic Acids Res 16:	
dh		rases 11696-97 and 11701-11702.	
M	•	POTTER, B. V. L., ROMAPVIUK, P. J., and ECKSTEEN, F. (1983) "The Steveo- chemical Covise of DNA hydrolysis	
		by SI hoclease " J Biol Chem	
•		258°, 1758-1760, pg 1759.	

Examiner Signature Date Considered 10/18/04

"EXAMINER: Intitial if reference considered, whether or not distion is in conformance with MPEP 609. Oraw line through distion if not in conformance and not considered. Include cupy of this form with next communication to applicant.

1 Applicant's unique clation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.